## 401 KAR 65:010. Vehicle emission control programs.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET Department for Environmental Protection Division for Air Quality

RELATES TO: KRS 224.10-100, 224.20-100, 224.20-110, 224.20-120, 224.20-710 to 224.20-765, 40 CFR Part 51, Subpart S, Appendices A, B, C, D, 42 USC 7401 through 7671q

STATUTORY AUTHORITY: KRS 224.10-100, 224.20-710 to 224.20-765

NECESSITY, FUNCTION AND CONFORMITY: KRS 224.10-100 requires the Natural Resources and Environmental Protection Cabinet to prescribe administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation provides the requirements for vehicle emission control programs in the Commonwealth.

Section 1. Definitions. As used in this administrative regulation, terms not defined in this section shall have the meaning given them in 401 KAR 65:001.

- (1) "Antitampering program" means an emission control program that provides for inspection of vehicles to detect removal or destruction of factory-installed emission control equipment or devices in vehicles.
- (2) "Antitampering inspection" means an inspection conducted pursuant to Section 6(2) of this administrative regulation to detect the presence of tampering.
- (3) "Automobile or truck" means a vehicle with at least four (4) wheels registered in the Commonwealth having a gross vehicle weight (GVW) of 18,000 pounds or less and licensed to operate upon the public highways for the purpose of transporting persons or property.
- (4) "Certificate of registration" means the document issued by county clerks pursuant to KRS Chapter 186 indicating that the owner or operator has properly registered the vehicle, or a document issued for that purpose from another state, territory, or country.
- (5) "Certification period" means the period for which a compliance or exemption certificate (other than a permanent exemption certificate issued pursuant to Section 4(1) of this administrative regulation) is valid.
- (6) "Compliance certificate" is governed by the definition in KRS 224.20-710(1).
- (7) "Contractor" means an independent contractor as governed by the definition in KRS 224.20-710(2).
  - (8) "Control system" is governed by the definition in KRS 224.20-710(3).
- (9) "Dynamometer" means a device for measuring the horsepower of a motor vehicle engine.
- (10) "Evaporative emission control system" means an unvented fuel cap, motor vehicle fuel tank, vapor vent hoses, and evaporative canister.
- (11) "Evaporative system integrity standard" means the minimum allowable level of pounds per square inch sustainable pressure for a given period of time, pursuant to Section  $5\,(1)\,(b)$  of this administrative regulation.
- (12) "Exemption certificate" is governed by the definition in KRS 224.20-710(4).
- (13) "Exhaust emission standard" or "emission standard" means the maximum allowable levels during a test of carbon monoxide, hydrocarbons, and the sum of carbon monoxide and carbon dioxide percentages appropriate for the age and type of vehicle tested, pursuant to Section 5(1)(a) of this administrative regulation.
- (14) "Fleet" means a group of vehicles owned, leased, or operated by a person who has the responsibility of obtaining the certificates of registration for the vehicles.
- (15) "Fleet operator" means the person who has the responsibility of obtaining the certificates of registration for fleet vehicles.
- (16) "Functional standard" means the evaporative system integrity standard (pressure standard).
- (17) "Gross vehicle weight" or "GVW" means the manufacturer's gross weight rating of a vehicle.
- (18) "Inspection station" is governed by the definition in KRS 224.20-710(5).

- (19) "Measurable improvement" means any improvement toward achieving the emission or functional standards when compared to the measured results obtained in the initial test.
- (20) "Opacity" means the degree to which a motor vehicle's tailpipe exhaust gas plume obstructs the transmission of visible light, as measured by a full-flow, direct reading, continuous reading light extinction opacity meter, pursuant to Section 6(5) of this administrative regulation.
- (21) "Opacity standard" means the maximum allowable opacity during an opacity test for the obstruction of visible light appropriate for a diesel vehicle, pursuant to Section 5(2) of this administrative regulation.
  - (22) "Operator" means a person who owns, leases, or operates a vehicle.
  - (23) "Owner" is governed by the definition in KRS 186.010(7).
  - (24) "Person" is governed by the definition in KRS 224.01-010(17).
- (25) "Program area" means the county or the contiguous counties which are designated nonattainment for ozone (except marginal) or carbon monoxide pursuant to 401 KAR 51:010, in which a vehicle inspection and maintenance program has been established, pursuant to Section 13 of this administrative regulation.
  - (26) "Retest" means any test performed after repair.
- (27) "Tampering" means removing, disconnecting, or rendering inoperative or ineffective any emission control device or element of design installed on or in a motor vehicle, and with which the vehicle was certified by the U.S. EPA.
- (28) "Test equipment" means the analyzers and diagnostic equipment used to test a vehicle's compliance with the emission and functional standards of Section 5 of this administrative regulation, which are approved by the U. S. EPA pursuant to 40 CFR 51.358 and 51.359, and Appendices A and D to Subpart S of 40 CFR 51, which are incorporated by reference in Section 14 of this administrative regulation.
- (29) "Test" or "testing" means the use of test equipment and the application of techniques and methods, approved by the cabinet pursuant to Section 6 of this administrative regulation, to determine compliance with the allowable exhaust emission standards, the functional standards, and the antitampering standards, pursuant to Section 5 of this administrative regulation.
- (30) "Testing period" means the period of time during which a vehicle is scheduled to be tested to receive a compliance certificate or exemption certificate and based on the vehicle identification number, as described in Section 3(1)(a) of this administrative regulation. This period consists of a three (3) month period that commences ninety (90) days prior to the expiration date of the vehicle's certificate of registration, this expiration date falling during the applicable odd or even numbered year identified in Section 3(1)(a) of this administrative regulation. The cabinet shall publish notices of the testing periods pursuant to Section 3(2) of this administrative regulation.
  - (31) "Vehicle" is governed by the definition in KRS 224.20-710(6).
- (32) "Vehicle emission control program" is governed by the definition in KRS 224.20-710(7).
- (33) "Vehicle identification number" or "VIN" means the number assigned to the vehicle by the vehicle's manufacturer or the assigned or replacement vehicle identification number approved by the Department of Vehicle Regulation pursuant to KRS 186.
- (34) "Vehicle inspection and maintenance program" means an emission control program implemented in a program area that requires vehicles subject to this administrative regulation to receive the testing required in Section 6(1) through (5) of this administrative regulation, as applicable, to demonstrate compliance with the standards of Section 5(1) and (2) of this administrative regulation.
- (35) "Vehicle repair facility" means a repair facility which is open to the general public for the repair of automobiles or other vehicles, is legally licensed to be in business, has a published telephone number, and has a federal employer's identification number (FEID number) or Kentucky business tax number if there is no FEID number.
- (36) "Vehicle inspection and repair form" means the form issued to the owner or operator of a vehicle when the vehicle is presented for inspection, pursuant to Section 9(2) of this administrative regulation.
- **Section 2. Applicability.** (1) The owner or operator of a 1968 or newer model year vehicle shall not renew a certificate of registration for that vehicle in a county located in a program area unless a current certificate of compliance,

issued pursuant to Section 9(1) of this administrative regulation, or a current exemption certificate issued pursuant to Section 4 of this administrative regulation, is presented to the county clerk. This administrative regulation shall apply to:

- (a) Owners or operators, including fleet operators, of vehicles that are registered in a county that has been designated nonattainment for ozone (except marginal) or carbon monoxide, pursuant to  $401\ \text{KAR}\ 51:010$ ; and
- (b) Owners or operators of vehicles owned exclusively by a county; city; urban-county; board of education; emergency and ambulance vehicles operated by nonprofit corporations organized by the local, state, or federal government; and vehicles owned exclusively by a nonprofit volunteer fire department, volunteer fire prevention unit, or volunteer fire protection unit, when the vehicles are assigned to a person or office located in a program area.
  - (2) The provisions for tampering shall become applicable:
- (a) On the date the vehicle emission control program commences testing vehicles in those program areas that had an antitampering program in effect before January 31, 1991; and
- (b) Beginning two (2) years after a vehicle emission control program commences testing vehicles in other program areas.
- (3) The contractor who enters an agreement with the cabinet to operate an emission inspection station shall be subject to the applicable requirements of this administrative regulation.
- (4) Personnel of a permitted inspection station shall be subject to the requirements of Section 12 of this administrative regulation.
- (5) Vehicles registered in a nonattainment county governed by a vehicle inspection and maintenance program implemented by a local air pollution control agency established pursuant to KRS Chapter 77 shall be exempt from this administrative regulation.

## Section 3. Inspection Frequency and Notification. (1) Inspection frequency.

- (a) Owners or operators of vehicles subject to this administrative regulation shall present their vehicles biennially for testing at a permitted inspection station located in the program area according to the following schedule based on the vehicle identification number:
- 1. A vehicle with an even model year shall be tested in even-numbered years; and
- 2. A vehicle with an odd model year shall be tested in odd-numbered vears.
- (b) A vehicle shall not be tested to receive a compliance certificate pursuant to Section 9(1) of this administrative regulation, or shall not receive an exemption certificate pursuant to Section 4 of this administrative regulation, prior to the vehicle's testing period, except as provided in Section 4(2) and (3) of this administrative regulation.
- (c)1. If a vehicle is inspected after the vehicle's testing period to receive a compliance or exemption certificate, the owner or operator shall pay the additional fee provided in Section  $8\,(3)$  of this administrative regulation in addition to any other applicable fee.
- 2. The owner or operator of the vehicle brought for inspection shall be exempt from the additional fee for testing after the testing period provided in Section 8(3) of this administrative regulation if he has acquired title to that vehicle less than twelve (12) months prior to the date of inspection, or if he has established residence in the program area less than twelve (12) months prior to the date of inspection. In order to have this fee waived, the owner or operator of the vehicle shall present appropriate documentation (such as the title to the vehicle or the vehicle's latest certificate of registration) to the cabinet or contractor representative collecting the fees.
- (d) The owner or operator shall pay the applicable fees, pursuant to Section 8 of this administrative regulation, when each vehicle is presented for testing. A compliance certificate, exemption certificate, or vehicle inspection and repair form shall not be issued until all applicable fees are paid, except as provided in paragraph (f) of this subsection.
- (e) An owner or operator of a vehicle that has been issued an exemption certificate by the cabinet or contractor, shall be exempt from paragraph (a) of this subsection for the period of time indicated on the exemption certificate, pursuant to Section 4 of this administrative regulation.

- (f) Federal, state and local agencies and public or private corporations with vehicles bearing official license plates, assigned to an office or individual in the program area, shall identify a contact person and shall submit, in writing, to the cabinet an initial listing of all assigned vehicles as of January 1 of each year for an annual testing of vehicles.
- 1. The listing shall be submitted to the contractor by January 31 of each year and shall include for each vehicle, at a minimum, the vehicle make, model year, VIN, license plate number, and a requested testing period.
- 2. The contractor shall notify the contact person responsible for approval of changes to the requested testing period by February 15 of each year.
- 3. The vehicles shall be subject to applicable emission and functional standards and the antitampering standard of Section 5 of this administrative regulation, to the applicable testing requirements of Section 6 of this administrative regulation, and to the fees provided in Section 8 of this administrative regulation. Fees shall be paid at the time of testing or in a schedule acceptable to the contractor and the cabinet.
  - (2) Notification.
- (a) The cabinet shall notify owners of the testing period assigned to their vehicles by mailing a notice to each owner's address as listed with the Kentucky Transportation Cabinet and shall publish a legal notice or classified advertisement at least one (1) day each month in the newspaper with the largest circulation that is distributed in the program area.
- (b) The mailed notice shall advise owners that, pursuant to KRS 224.20-720(2), the county clerk shall not renew a vehicle's certificate of registration without a compliance certificate or an exemption certificate issued by a permitted inspection station located in the program area, and shall notify owners that a vehicle shall be rejected from the inspection station if tampering has occurred.
- (c) In addition to the information required in paragraph (b) of this subsection, the notice in the newspaper shall also advise the public of their obligation to have each vehicle tested prior to having the vehicle's certificate of registration renewed and shall specify the testing period for vehicles with certificates of registration due for renewal in the next three (3) months.
- (d) Failure of the owner or operator to receive a notice shall not excuse the owner or operator from complying with this administrative regulation.
- **Section 4. Exemption Certificates.** A person shall not issue or use an exemption certificate in violation of this administrative regulation. The following types of exemption certificates shall be issued by the contractor or the cabinet pursuant to the procedures in this section:
  - (1) Permanent exemption certificate.
- (a) The owners or operators of vehicles equipped to operate exclusively on fuels other than gasoline or diesel fuel shall present the vehicle for inspection by the contractor during the initial testing period.
- (b) If the cabinet confirms that the vehicle is not equipped to operate with gasoline or diesel fuel, a permanent exemption certificate shall be issued.
- (c) The owner or operator of a vehicle, for which a permanent exemption certificate has been issued, shall not operate the vehicle if it is altered so that it may operate using gasoline or diesel fuel, without presenting the vehicle for testing at a permitted inspection station within thirty (30) days after the vehicle has been altered.
  - (2) Temporary exemption certificate.
- (a) A temporary exemption certificate shall be issued by the cabinet if the owner or operator demonstrates and affirms to the cabinet, pursuant to subsection (4) of this section, that the vehicle will not be available for testing during the testing period. The owner or operator of a vehicle shall not seek a temporary exemption certificate to avoid testing which would otherwise be required.
- (b) The owner or operator shall notify the cabinet when the vehicle will be available for testing and provide the VIN, proof of ownership, and the driver's license of the owner.
- (c) The temporary exemption certificate shall expire thirty (30) days after the date the owner or operator indicates that the vehicle will be available for testing, except that the cabinet may extend the temporary exemption certificate upon further demonstration and affirmation by the owner or operator that the vehicle remains unavailable for testing. A temporary exemption

certificate shall not be valid beyond the last day of the certification year in which it was issued.

- (d) Prior to the expiration of a temporary exemption certificate, the owner or operator shall present the vehicle and the current temporary exemption certificate to a permitted vehicle inspection station when the vehicle is available for testing, and shall pay the test fee specified in Section 8(1) of this administrative regulation and the additional fee specified in Section 8(3) of this administrative regulation.
- (e) The owner or operator shall obtain a compliance certificate or a repair cost exemption certificate, as applicable, before the temporary certificate expires. Failure of the owner or operator to obtain a compliance certificate or exemption certificate prior to the expiration of the temporary exemption certificate shall result in the cabinet's denial of another temporary exemption certificate and shall subject the owner or operator to penalties for failure to comply with KRS 224.20-710 to 224.20-765.
  - (3) Certification period exemptions.
- (a) An exemption certificate shall be issued by the cabinet if the owner or operator demonstrates and affirms to the satisfaction of the cabinet, pursuant to subsection (4) of this section, that the vehicle will not be operated in the program area for more than thirty (30) days during a certification period.
- (b) The owner or operator shall present to the cabinet the documentation demonstrating that the vehicle will not be operated in the program area, the VIN, proof of ownership, the driver's license number or Social Security number of the owner, and the location of the vehicle during the certification period. The owner or operator shall pay the exemption certificate fee specified in Section 8(5) of this administrative regulation.
- (c) An exemption certificate shall be issued by the cabinet for a given certification period if the owner or operator demonstrates to the satisfaction of the cabinet that the vehicle has a valid compliance or exemption certificate issued by an equivalent emission control program approved by the U.S. EPA as part of a state implementation plan. The certificate shall be valid for the period that the certificate would have been valid if it had been issued pursuant to this administrative regulation. The owner or operator shall pay the exemption certificate fee specified in Section 8(5) of this administrative regulation.
  - (4) Acceptable proof for temporary and certification period exemptions.
- (a) Requests for a temporary or certification period exemption shall be in the form of an affidavit signed by the owner or operator, stating the reason and the length of time the vehicle will be located out of the program area, or otherwise unavailable for testing, and shall include the address where the vehicle will be located during the period.
- (b) Military personnel who are on active duty and who will be stationed 150 miles or more from a program area during a certification period may be granted an exemption if the cabinet receives a copy of the military orders or letter from their commanding officer or executive officer verifying that the assignment is 150 miles or more from the program area and that the assignment will continue during the period for which the exemption is requested.
- (c) Owners or operators of vehicles subject to this administrative regulation who are registered as full-time students at a college, university, or other school, which is 150 miles or more from a program area, may be granted an exemption if the school's registrar verifies in writing the student's registration and the period of enrollment.
- (d) Owners or operators of vehicles subject to this administrative regulation may request temporary or certification period exemption certificates by mail provided the owner or operator and vehicle meet the applicable requirements of this subsection. The cabinet shall grant or deny a request within twenty (20) days of receipt of the request.
- (5) Repair cost exemption certificates. A repair cost exemption certificate, valid for the stated certification period, may be issued to the owner or operator of a vehicle subject to this administrative regulation if the following criteria have been met and the vehicle does not meet the applicable standards in Section 5 of this administrative regulation:
- (a) The vehicle has achieved at least a measurable improvement in the amount of emissions for each pollutant or opacity standard for which the vehicle was failed, as measured from the first exhaust emission test.
- (b) A visual inspection and, if available, an on-board diagnostics check identifies no further necessary repairs which may result in an improvement in the

vehicle's emissions. Repairs that the cabinet may require include, but are not limited to:

- 1. Replace the air filter;
- 2. Replace the positive crankcase ventilation valve;
- 3. Replace the evaporative canister;
- 4. Replace the  $NO_x$  sensor;
- 5. Adjust the air-to-fuel mixture;
- 6. Adjust the idle speed;
- 7. Adjust or repair the choke;
- 8. Repair float, power valves, needles, seats, and jets;
- 9. Repair vacuum hoses;
- 10. Replace spark plugs;
- 11. Replace plug wires;
- 12. Replace distributor, rotor cap, or points;
- 13. Adjust dwell or timing;
- 14. Replace oxygen sensor; and
- 15. Repair or replace the exhaust gas recirculation valve, carburetor, fuel injector, catalytic converter, electronic control module computer, or secondary air system, if the repair or replacement is covered under a manufacturer's or dealer warranty.
- (c) The owner or operator of the vehicle which failed the retest has spent at least the following amounts for repairs on the applicable model year vehicle in attempting to have the vehicle pass a retest in the applicable program area:
- 1. For 1980 or older model years, the owner or operator has spent at least seventy-five (75) dollars;
- 2. For 1981 and newer model years, the owner or operator has spent at least \$200;
- 3. For vehicles covered by 42 USC 7541(b), the owner or operator has spent at least \$200.
- 4. For a diesel vehicle, the owner or operator has spent at least seventy-five (75) dollars.
- (d) The costs applied toward a cost exemption certificate shall be only for repairs based on appropriate diagnostics to correct problems related to an emission test failure, and shall not include costs to replace or repair components as a result of tampering. The cost of repairs to correct leaking, defective, or detached exhaust systems shall not be included in receiving a repair cost exemption certificate.
- (e) Available warranty coverage shall be used to obtain needed repairs before expenditures can be counted towards the costs limits required by a cost exemption certificate. The owner or operator of a vehicle within the statutory age and mileage coverage under 42 USC 7541(b) shall present a written denial of warranty coverage from the manufacturer or authorized dealer for the repair costs to be included in the cost limits counted toward the cost exemption certificate.
- (f) Labor costs shall not be applied toward a cost exemption certificate for repairs performed on a vehicle by the owner or operator of that vehicle except as provided in Section 7(2)(f) of this administrative regulation.
- (g) An owner or operator may appeal the denial of a repair cost exemption certificate pursuant to the provisions of Section 11 of this administrative regulation.
- Section 5. Standards of Performance for Vehicles. (1) The owner or operator of a vehicle subject to this administrative regulation shall be issued a compliance certificate, pursuant to Section 9(1) of this administrative regulation, if the vehicle meets the applicable emission, functional, and antitampering standards of this subsection and the applicable testing requirements of Section 6 of this administrative regulation.
- (a) Exhaust emissions standard. The maximum allowable levels of carbon monoxide (CO) and hydrocarbons (HC), as measured by the idle exhaust emissions test, pursuant to Section 6(3) of this administrative regulation, for the applicable vehicle type, model year, pollutant, and gross vehicle weight (GVW) shall be as listed in the following table:

| Vehicle<br>Model Year | Vehic<br>Regist<br>as<br>Automo | ered      | having (6,000 11 |           | greater<br>6,000 ll<br>equal |           | Vehic<br>with<br>greater<br>10,000<br>but equ<br>18,000<br>or le | GVW than lbs al to lbs |
|-----------------------|---------------------------------|-----------|------------------|-----------|------------------------------|-----------|--|------------------------|
|                       | HC<br>(ppm)                     | CO<br>(%) | HC<br>(ppm)      | CO<br>(%) | HC<br>(ppm)                  | CO<br>(%) | HC<br>(ppm)<br>(%)   | CO                     |
| 1968                  | 950                             | 8.5       | 1300             | 8.0       | 1500                         | 9.0       | 1500   | 9.0                    |
| 1969                  | 900                             | 8.5       | 1200             | 8.0       | 1100                         | 8.0       | 1300   | 8.5                    |
| 1970                  | 850                             | 8.4       | 1100             | 8.0       | 1100                         | 8.0       | 1300   | 8.5                    |
| 1971                  | 850                             | 8.1       | 1000             | 8.0       | 1000                         | 8.0       | 1200   | 8.5                    |
| 1972                  | 800                             | 8.0       | 1000             | 7.8       | 950                          | 7.5       | 1000   | 7.0                    |
| 1973                  | 800                             | 7.8       | 1000             | 7.8       | 950                          | 7.5       | 1000   | 7.0                    |
| 1974                  | 800                             | 7.6       | 950              | 7.8       | 950                          | 7.5       | 1000   | 7.0                    |
| 1975                  | 700                             | 7.5       | 900              | 7.0       | 950                          | 7.5       | 1000   | 7.0                    |
| 1976                  | 700                             | 6.5       | 700              | 7.0       | 900                          | 7.5       | 1000   | 7.0                    |
| 1977                  | 650                             | 6.3       | 700              | 7.0       | 850                          | 7.5       | 900  | 6.5                    |
| 1978                  | 600                             | 5.5       | 700              | 6.3       | 700                          | 6.0       | 900  | 6.5                    |
| 1979                  | 600                             | 4.5       | 450              | 5.5       | 650                          | 5.5       | 900  | 6.5                    |
| 1980                  | 250                             | 2.5       | 450              | 4.0       | 550                          | 5.0       | 900  | 6.5                    |
| 1981                  | 220                             | 1.2       | 350              | 1.7       | 450                          | 4.0       | 500  | 3.5                    |
| 1982                  | 220                             | 1.2       | 220              | 1.2       | 400                          | 2.5       | 400  | 3.0                    |
| 1983                  | 220                             | 1.2       | 220              | 1.2       | 350                          | 2.0       | 400  | 3.0                    |
| 1984                  | 220                             | 1.2       | 220              | 1.2       | 220                          | 1.5       | 250  | 1.5                    |
| 1985 &                | 220                             | 1.2       | 220              | 1.2       | 220                          | 1.2       | 250  | 1.5                    |
| newer                 |                                 |           |                  |           |                              |           |  |                        |

\* Other than vehicles registered as automobiles.

- Evaporative system integrity standard (pressure standard). For 1981 and newer model gasoline vehicles, the pressure standard for the evaporative emission control system shall be a minimum sustainable pressure of eight (8) inches of water for a maximum period of two (2) minutes, as measured by the evaporative system integrity test, pursuant to Section 6(4) administrative regulation.
- Antitampering standard. Vehicles shall be inspected by inspection (C) station or cabinet personnel for tampering, pursuant to Section 6(2) of this administrative regulation. A vehicle which shows evidence of tampering shall be determined as not achieving this standard.
- Emission standard for diesel vehicles. A diesel vehicle shall not emit visible emissions in excess of ten (10) percent opacity for ten (10) or more consecutive seconds, as measured by the test equipment pursuant to Section 6(5)of this administrative regulation, when tested at idle engine speed.

  (3) Rejection of vehicles. A vehicle shall be rejected from the
- inspection station if:
- The inspection station or cabinet personnel are unable to determine (a) readily that the vehicle presented at the inspection station is the vehicle identified in the VIN, certificate of registration, or license tag; or
- The vehicle, its contents, load, passengers, or operator causes, or has the appearance of causing, an unsafe condition at the inspection station. The test shall not be performed until the condition is corrected. The conditions for rejection shall include, but shall not be limited to, the following:
  - Leaking fuel;
- The leaking of potentially toxic or hazardous materials, other than 2. normal drive-train fluid;
  - 3. Operator incapacity;
  - Operator or passenger misconduct; 4.
- 5. For vehicles that are preconditioned on a dynamometer, the vehicle tire cords are visible;
  - The vehicle has a space-saver spare tire mounted on the drive axle; 6.
  - 7. The vehicle is pulling a detachable trailer or load;
  - The vehicle stalls repeatedly; 8.
  - The vehicle has leaking, defective, or detached exhaust systems;
- The vehicle has exhaust tailpipes altered from those of the original manufacturer of the vehicle so that proper access by the test equipment required in Section 6 of this administrative regulation is not possible; or
- 11. The inspection would cause inspection station personnel to be in an unsafe position, as determined by the contractor. Inspection station personnel shall document all rejections and the reasons for the rejection.
- Section 6. Test Procedures for Vehicles. (1) Operator procedures for gasoline vehicles. The operator shall operate the vehicle for testing pursuant to the conditions specified in this section and at the direction of inspection station personnel as follows:
- Unless otherwise directed, the operator shall remain in the vehicle (a) while the vehicle is in the test lane.
- During testing, the engine shall be at normal operating temperatures and shall not be overheating (as indicated by a gauge or warning light or boiling radiator), with all accessories turned off.
  - Vehicles shall be approximately level during testing. (c)
  - If the engine stalls during testing, the test shall be restarted. (d)
  - Antitampering inspection.
- The inspection station personnel shall perform an antitampering inspection on all 1975 and newer model year vehicles presented to the inspection station for compliance with KRS 224.20-710 to 224.20-765. The procedure shall consist of a visual inspection for the presence of tampering.
- If tampering is found, the owner or operator shall be so informed and shall be issued a vehicle emission repair form. Tampered vehicles shall not complete the applicable exhaust emission and function test procedures until the vehicle has been repaired.
- Missing or damaged components shall be repaired, regardless of expense. The cost of repair or replacement of these components is not subject to a repair cost exemption certificate provided in Section 4(5) of this administrative regulation.

- 2. Upon repair or replacement of tampered, inoperable, missing or malfunctioning components (except for an unvented fuel cap), the owner or operator shall present the vehicle for inspection and the completed vehicle inspection and repair form, signed by a mechanic of a vehicle repair facility, demonstrating that the components have been repaired or replaced and are in proper operating condition.
- (3) Idle exhaust emission test procedure for gasoline vehicles. The idle exhaust emissions test shall measure vehicle exhaust gas emissions for carbon monoxide (CO), carbon dioxide (CO $_2$ ), and hydrocarbons (HC) and shall be performed pursuant to 40 CFR 51, Subpart S and Appendices B and C to Subpart S, as published in the July 1, 1996, edition of the Code of Federal Regulations, which is incorporated by reference in Section 14 of this administrative regulation, and the following:
- (a) Analyzers shall be warmed up, in stabilized operating condition, and adjusted according to manufacturer's specifications.
- (b) If the vehicle is capable of being operated with gasoline or other fuels, the test shall be conducted using gasoline.
- (c) Multiple exhaust vehicles shall be tested by sampling all exhaust points simultaneously or by other methods approved by the cabinet.
- (d) Inspection station personnel shall attach the tachometer. With the engine operating at idle speed, the emergency brake on, and the transmission in "neutral" for vehicles with manual transmissions or "park" for vehicles with automatic transmissions, the sampling probe of the gas analytical system shall be inserted at least ten (10) inches into the tail pipe. If the probe cannot be inserted at least ten (10) inches, exhaust pipe extension boots shall be used.
- (e) First chance to pass. The initial idle mode shall have a maximum duration of ninety (90) seconds and a minimum duration of thirty (30) seconds.
- 1. The analysis shall begin after an initial time delay of ten (10) seconds. If, within thirty (30) seconds the hydrocarbon reading is equal to or less than 100 parts per million and the carbon monoxide reading is five-tenths (0.5) percent or less, the vehicle shall pass the test. If these readings are not obtained within the first thirty (30) seconds, the test shall be continued for up to an additional sixty (60) seconds. If at any time during the sixty (60) second period, the readings for both hydrocarbons and carbon monoxide meet the emission standards for the applicable vehicle model year and GVW, the vehicle shall pass the test.
- 2. If at any time during the test the carbon monoxide (CO) plus carbon dioxide (CO<sub>2</sub>) concentration falls below six (6) percent, the test shall be voided. If the low concentration is due to the engine size or operating temperature, the lane operator may over ride the CO plus  ${\rm CO_2}$  concentration and continue the test.
- (f) Second chance to pass. If the vehicle does not pass the procedure in paragraph (e) of this subsection, the test probe shall be removed, and the owner or operator shall be given the option of accepting that the vehicle has failed the test and requires repairs, or accepting the offer of a second chance to pass a test, after being preconditioned on a dynamometer. If the owner or operator chooses to have the vehicle tested a second time, the test timer shall be reset to zero, and a second chance test shall be performed after using one (1) of the following preconditioning procedures:
- 1. The power axle of the vehicle shall be mounted on a dynamometer. For dynamometer preconditioning, vehicles with front wheel drive shall be driven by the lane operator or other contractor designee. The mode timer shall initiate when the dynamometer speed is within the limits specified for the vehicle engine size. The mode shall continue for a minimum of thirty (30) seconds. The dynamometer test schedule for engine preconditioning prior to a second-chance idle test shall be within the following limits:

|            | Engine Size          | Roll Speed  | Normal Loading   |  |  |
|------------|----------------------|-------------|------------------|--|--|
|            | 4 or fewer cylinders | 22 - 25 mph | 2.8 - 4.1 brake  |  |  |
| horsepower |                      |             |                  |  |  |
|            | 5 - 6 cylinders      | 29 - 32 mph | 6.8 - 8.4 brake  |  |  |
| horsepower |                      |             |                  |  |  |
|            | 7 or more cylinders  | 32 - 35 mph | 8.4 - 10.8 brake |  |  |
| horsepower |                      |             |                  |  |  |

2. Full-time four (4) wheel drive vehicles shall be preconditioned with the engine speed at 2500 revolutions per minute (2500 rpm) plus or minus 300

revolutions per minute ( $\pm 300$  rpm) for thirty (30) seconds with the transmission in either "park" or "neutral."

- 3. Immediately following the preconditioning mode and when the vehicle's wheels are no longer moving, the mode timer shall be started and run for a period not to exceed ninety (90) seconds. The test probe shall be reinserted and the procedures described in paragraph (f) of this subsection shall be repeated.
- 4. If any pair of readings shows passing scores for both hydrocarbons and carbon monoxide, the vehicle shall pass the test. If all readings exceed the hydrocarbon limit or the carbon monoxide limit, or both, the vehicle shall fail the test. The operator shall be informed of the results, and the lane operator shall suggest that the owner or operator of the vehicle take a pamphlet that suggests various types of repairs for vehicles that fail the test.
  - (4) Evaporative system integrity test (pressure test).
- (a) An evaporative system integrity test shall be performed on all 1981 and newer model gasoline powered vehicles presented for the purpose of compliance with this administrative regulation as follows:
- (b) Inspection station personnel shall direct the operator of the motor vehicle to shut off the vehicle's engine. The operator shall allow inspection station personnel access to the motor vehicle engine compartment by releasing the hood latch or other method.
- (c) Inspection station personnel shall disconnect all components and lines leading from the fuel tank at the junction of the evaporative canister. All lines and components, other than the main vent line, shall be sealed and made air tight. Vehicles with evaporative canisters that are inaccessible to inspection station or cabinet personnel, due to factory design of the vehicle, shall have the pressure test portion of this administrative regulation waived by the cabinet. A missing or damaged evaporative canister shall result in failure of the pressure test.
- (d) The main vent line shall be pressurized to fourteen (14) inches of water, not to exceed twenty-six (26) inches of water system pressure, with commercial grade nitrogen. After the pressure is stabilized, the main vent line shall be sealed and the system pressure monitored for a maximum of two (2) minutes. An evaporative system that maintains a constant internal pressure equal to or greater than eight (8) inches of water for a duration of two (2) minutes shall be deemed acceptable.
- (e) At the end of the two (2) minute monitoring period the unvented fuel cap shall be removed and the monitoring equipment shall be observed for a decrease of internal pressure.
  - (f) Inspection station personnel shall:
  - 1. Remove all monitoring equipment from the main vent line;
- 2. Remove all seals from all other components and lines disconnected from the evaporative canister; and
- 3. Reconnect the system in the configuration in which the vehicle was presented for inspection.
- (g) Upon successful completion of paragraphs (d) and (e) of this subsection, the vehicle shall pass the test.
- (h) If any of the following occurs, the vehicle shall fail the test. The operator shall be informed of the results, and the repairs recommended to correct the system deficiencies shall be included on the vehicle emission repair form.
- 1. An internal system pressure of fourteen (14) inches of water is not obtained;
- 2. The internal system pressure drops below eight (8) inches of water at any time during the two (2) minute monitoring period; or
- 3. Upon removal of the unvented fuel cap, a decrease in internal pressure is not observed.
- (i) The cost of repairs performed on the evaporative emission control system, that are not a result of tampering, may be applied to a repair cost exemption certificate, pursuant to Section  $4\,(5)$  of this administrative regulation.
- (5) Test procedures for diesel vehicles. The operator of a diesel vehicle shall allow the vehicle to be operated for testing pursuant to the conditions specified Section 6(1) of this administrative regulation and the following:
- (a) Diesel-powered vehicles shall be inspected with an opacity meter that is a full-flow, direct reading, continuous reading light extinction type using a collimated light source and photo-electric cell, accurate to within plus or minus five (5) percent.

- (b) Separate measurements shall be made on each exhaust outlet on diesel vehicles equipped with multiple exhaust outlets. The reading taken from the outlet giving the highest reading shall be used for comparison with the standard for the vehicle being tested.
- (c) A diesel vehicle shall meet the opacity standard specified in Section  $5\,(2)$  of this administrative regulation to pass the test. If the vehicle fails the test, the operator shall be so informed and the repairs required to correct the deficiency shall be included on the vehicle inspection and repair form.
- (6) If trouble codes are identified by the on-board diagnostic (OBD) system, the owner or operator shall be so informed and the lane operator shall suggest that the owner or operator of the vehicle take a pamphlet that suggests various types of repairs for vehicles that fail the test.
- Section 7. Testing of Fleet Vehicles. (1) The owner or operator of a fleet may apply for a permit to operate a fleet inspection station to test the vehicles that are in that fleet. A fleet inspection station shall not be operated without a fleet inspection permit issued by the cabinet. The owner or operator of a fleet inspection station shall comply with this section.
- (a) The fleet owner or operator shall submit a complete application for a permit to the cabinet, using Form DEP-V001, Permit Application to Operate a Fleet Vehicle Inspection Station, which has been incorporated by reference in Section 14 of this administrative regulation.
- (b) The permit shall be valid for one (1) year and may be renewed by the cabinet. For renewal of the permit, the fleet operator shall submit to the cabinet an updated fleet inspection station application form at least forty-five (45), but no more than sixty (60) days, prior to the permit's expiration.
- (c) The fee for a fleet inspection station permit or permit renewal shall be \$200, pursuant to Section 8(7)(d) of this administrative regulation.
  - (2) The fleet operator shall:
- (a) Submit to the cabinet a schedule for the testing of the fleet vehicles and payment of the inspection fees, pursuant to Section 8(7) (a) through (c) of this administrative regulation;
- (b) Test the vehicles in the fleet according to the schedule in the fleet inspection permit. The schedule shall contain the following information:
  - 1. The number of vehicles to be tested;
  - 2. The VINs of the vehicles to be tested;
  - 3. The months the vehicles will be tested; and
  - The operating hours and location of the fleet inspection station;
  - (c) Use the forms and compliance certificates issued by the cabinet;
- (d) Issue exemption certificates pursuant to Section 4 of this administrative regulation;
- (e) Use test equipment and procedures approved by the cabinet pursuant to Sections 5 and 6 of this administrative regulation and assure that the test equipment provides a recordkeeping mechanism to record the results of all tests;
- (f) Maintain records of all operations associated with the testing of the fleet vehicles, including but not limited to the repairs to fleet vehicles that failed the test;
- (g) Make available to the cabinet and the contractor the results of the tests performed by the fleet inspection station;
- (h) Provide a procedure for integrating the results of the tests performed by the fleet operator into the recordkeeping system of the contractor who operates the vehicle emission control program in the program area where the fleet is located;
- (i) Perform the daily and hourly quality assurance procedures that are prescribed in the contract between the cabinet and the contractor, each day the analyzers are in operation, and allow the cabinet or the contractor to perform the other quality assurance activities as prescribed in the contract; and
  - (j) Maintain an in-house program for the maintenance of vehicles.
- (3) A fleet operator may enter into an agreement with the contractor who holds the contract for testing vehicles within the program area where the fleet is located, for testing the fleet vehicles by the contractor outside public testing hours or at mobile inspection stations. The agreement shall not be implemented unless it has been approved by the cabinet.
- Section 8. Fees. (1) The fee for testing a vehicle shall be based upon the contract that is awarded and the cabinet's costs of implementing the vehicle

emission control program in the program area, unless other fees are also applicable. The fee shall be paid each year that an owner or operator is required to obtain a compliance or exemption certificate.

- (2) Unless the vehicle is tested at a fleet inspection station or pursuant to an agreement with the contractor, the fee shall be collected before the testing commences or before an exemption certificate is issued. If the vehicle fails the first test, the first retest shall be provided at no cost if the appropriate vehicle inspection and repair form is satisfactorily completed and returned. Each test performed in addition to the first test and first retest shall be subject to the additional fee specified in subsection (5) of this section. The owner or operator shall submit the properly completed vehicle inspection and repair form for the last failed test at the time of the new test.
- (3) The fee for having a vehicle tested before or after its testing period shall be five (5) dollars.
- (4) The fee for the issuance of a duplicate compliance certificate or exemption certificate, pursuant to Section 10 of this administrative regulation, shall be five (5) dollars.
- (5) The fee for issuing an exemption certificate shall be equal to the cost of the test. A fee shall not be charged for the issuance of a permanent exemption certificate.
- (6) The additional fee for the issuance of a compliance certificate or exemption certificate, the year after a temporary exemption certificate was issued to an owner or operator, who did not present the vehicle for testing prior to the expiration of the temporary exemption certificate, shall be twenty-five (25) dollars.
  - (7) Fees for testing fleet vehicles.
- (a) The fee for a compliance or exemption certificate for a fleet vehicle which is tested at a fleet inspection station shall be no less than the fee established by the contract between the cabinet and the contractor.
- (b) The fee for a compliance or exemption certificate for a fleet vehicle which is tested by the contractor under an agreement implemented pursuant to subsection (3) of this section, shall be no less than the fee established by the contract between the cabinet and the contractor. The contractor may charge an additional fee which shall not exceed the contractor's additional cost of testing the fleet.
- (c) The fees for compliance or exemption certificates issued to fleet vehicles may be paid on a weekly or monthly basis, or as otherwise approved by the cabinet or agreed to by the contractor and the fleet operator, as applicable.
  - (d) The fee for renewal of a fleet inspection station shall be \$200.
- Section 9. Forms and Certificates. The contractor shall use only forms, compliance certificates, and other materials that are approved by the cabinet. The following documents may be issued to the owner or operator according to this administrative regulation.
- (1) Compliance certificate. The operator of each vehicle which meets the applicable emission, functional, and antitampering standards specified in Section 5 of this administrative regulation, complies with the testing requirements of Section 6 of this administrative regulation, and has paid the applicable fee specified in Section 8 of this administrative regulation shall be issued a compliance certificate. The compliance certificate shall contain at least the following information:
  - (a) Inspection station identification;
  - b) Date and time of test;
  - (c) Identification number of the inspector;
  - (d) Vehicle license number;
  - (e) VIN, vehicle model year, and vehicle make;
  - (f) Applicable emission standards;
- (g) Emission test results (hydrocarbon, carbon monoxide, sum of carbon monoxide and carbon dioxide percentage, and if applicable, oxides of nitrogen);
  - (h) Applicable pressure standards;
  - (i) Evaporative integrity test results (minimum sustained pressure);
- (j) Whether the test results are from the first test, first retest, or subsequent retest; and
  - (k) A unique, encoded test identification number.
  - (2) Vehicle inspection and repair forms.

- (a) A vehicle inspection and repair form shall be issued to the operator of each vehicle which fails a test. The contractor shall indicate the recommended repairs to be performed. The vehicle inspection and repair form is incorporated by reference in Section 14 of this administrative regulation. The form shall be completed and returned to the inspection station personnel at the time of the retest. The owner shall indicate the following items on the vehicle inspection and repair form with supporting documentation:
- 1. Proof that repairs were performed and repair costs were incurred which were reasonable. Repairs made earlier than thirty (30) days prior to the first test failure for the current testing period shall not be included; and
- 2. A list of the repairs in sufficient detail for the contractor to determine that the repairs are related to the type of failure shown on the vehicle inspection and repair form.
- (b) The person performing repairs on a vehicle shall indicate on the repair form the repairs performed and the itemized costs. The person shall affirm that all the repairs, checks, and adjustments were properly performed in accordance with requirements on the form by signing and printing his name and the date of repairs on the vehicle inspection and repair form. If the repairs were performed by a mechanic at a vehicle repair facility, the repair facility's name, federal employer's identification number (FEID number), or Kentucky business tax number if there is no FEID number, repair date, and business telephone number shall be included on the vehicle inspection and repair form. In the appeals process, if the cabinet determines that the work claimed to have been completed was not done or was not in accordance with stipulations on the vehicle inspection and repair form, the cabinet may withhold issuance of a repair cost exemption certificate, and the owner or operator may be subject to penalties under KRS 224.20-765.
- **Section 10. Duplicate Certificates.** The cabinet may issue a duplicate compliance, exemption, temporary exemption, or repair cost exemption certificate if the original certificate is lost. The owner shall notify the cabinet as soon as possible after the loss is noticed. The fee for a duplicate certificate shall be as prescribed in Section 8(4) of this administrative regulation.
- Section 11. Request for reconsideration. (1) An owner or operator may request a reconsideration of the denial of a repair cost exemption certificate if the following conditions have been met:
- (a) The owner or operator has spent at least the amount specified in Section 4(5)(c) of this administrative regulation and no measurable improvement in emissions was achieved; or
- (b) The owner or operator has spent less than the amount specified in Section 4(5) (c) of this administrative regulation and a mechanic employed at a repair facility affirms that no additional repairs can be performed that would improve the vehicle's emissions or that additional repairs would result in a total repair cost greater than the amount specified in Section 4(5) (c) of this administrative regulation for the vehicle age.
- (2) Requests for reconsideration of a denial of a cost repair waiver shall be made in writing and delivered to the contractor's inspection station manager or other contractor designee who shall promptly forward the request to the cabinet and a cabinet retest date shall be scheduled and performed. The results of the retest shall be a final determination of the cabinet.
- Section 12. Inspection Station Personnel Requirements. (1) All inspection station personnel shall successfully complete a training course approved by the cabinet. The training course shall include at least the following components:
  - (a) Causes and affects of air pollution;
- (b) The purposes, functions, and goals of the vehicle emission inspection program;
  - (c) KRS 224.20-710 to 224.20-765 and this administrative regulation;
- (d) Technical details of the test procedures and the rationale for their design;
  - (e) Emission control device function, configuration, and inspection;
  - (f) Test equipment operation, calibration, and maintenance;
  - (g) Quality control procedures and their purpose;

- (h) Methods of providing courteous, fair, and efficient service to the public; and
  - Safety and health issues related to the inspection process. (i)
- (2) Successful completion of the training course shall be determined by a written examination with a score of eighty (80) percent or more and successful performance of a complete unassisted vehicle inspection demonstrating proper procedures. The written examination may be administered and the demonstration observed by the training course provider.
- (3) The cabinet shall certify all contractor personnel that successfully complete the requirements of subsection (2) of this section. The certification shall expire two (2) years from the date of issuance. Contractor personnel whose certifications have expired are prohibited from inspecting vehicles until they complete the training requirements in this section and are recertified.
- Inspection station personnel shall wear identification tags visible to the public.
- (5) Neither the contractor nor any employee of the contractor shall engage in the business of manufacturing, selling, maintaining, or repairing vehicles. The contractor may maintain or repair his own vehicles.
- Section 13. Vehicle Emission Control Program Areas, Established. (1) The cabinet shall establish a vehicle emission control program in counties in which the entire county has been designated moderate ozone nonattainment in 401 KAR 51:010.
- The vehicle emission control programs established pursuant to this administrative regulation shall continue upon redesignation of the program areas to attainment for ozone in 401 KAR 51:010.

Section 14. Incorporation by Reference. (1) The following forms required for vehicle emission control programs are hereby incorporated by reference:

- (a) "Form DEP-V001, Permit Application to Operate a Fleet Vehicle Inspection Station, July 15, 1993;" and

  (b) "Form DEP-V002, Vehicle Inspection and Repair Form."
- The following guidance documents which contain test methods and (2) equipment specifications to be used by the contractor are hereby incorporated by reference:
- 40 CFR 51.350 to 51.373, and Appendices A, B, C, and D to Subpart S, as published in the Code of Federal Regulations, July 1, 1996.
- (3) The material incorporated by reference may be obtained, inspected, or copied at the following offices of the Division for Air Quality, Monday
- through Friday, 8:00 a.m. to 4:30 p.m.:

  (a) Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601-1403, (502) 573-3382;
- (b) Ashland Regional Office, 3700 Thirteenth Street, Ashland, Kentucky, 41105-1507, (606) 920-2067;
- Bowling Green Regional Office, 1508 Westen Avenue, Bowling Green, Kentucky, 42104, (502) 746-7475;
- (d) Florence Regional Office, 7964 Kentucky Drive, Suite 8, Florence, Kentucky, 41042, (606) 292-6411;
- (e) Hazard Regional Office, 233 Birch Street, Suite 2, Hazard, Kentucky, 41701, (606) 435-6022;
- (f) London Regional Office, 85 State Police Road, London, Kentucky, 40741-9011, (606) 878-0157;
- Owensboro Regional Office, 3032 Alvey Park Drive W., Suite 700, Owensboro, Kentucky 42303, (502) 687-7304; and
- (h) Paducah Regional Office, 4500 Clarks River Road, Paducah, Kentucky, 42003, (502) 898-8468.

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